

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-006355**Date Inspected:** 22-Apr-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Duan Yabing**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day Caltrans OSM Quality Assurance (QA) Inspector Erik Prue was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA Inspector observed and/or found the following:

Bay 9: QA Inspector observed welding utilizing the dual process Flux Core Arc Welding (FCAW) and Submerged Arc Welding (SAW) WPS-B-T-2342-U1 (U-rib)-4 welding procedure specification for welding of the Deck Panels DP296-001 lift 11EW and DP512-001 lift 11EE closed U-rib Partial Joint Penetration (PJP) welds. ZPMC welding personnel performed Gantry Machine GMAW for the root pass and SAW for the cover/final pass on deck panel. QA Inspector observed the ZPMC QC CWI Inspector Duan Yabing and ABF QC Inspector Cao Hai Zhau monitoring and verifying welding parameters and pre-heat were in accordance with the Welding Procedure Specification (WPS). QA Inspector with QC Inspectors observed parameters taken for DP296-001 utilizing the SAW process for welders # 201840, 059400, 059445, and 201788 as follows: preheat temperature to be at 22°C (10°C minimum) and measured the welding parameters to be between the range of 623.3 to 761.7 amps, 23.8 to 27.4 volts, a travel speed of 476 to 644 mm/min. Welding parameters verified by QA Inspector for the above four (4) welders appear to be in general compliance with the approved WPS requirements.

QA Inspector continued OBG Segment tracking documentation control for sub assembly green tagging, segment weld repairs after blast cleaning, and segment splicing fit up dimensions taken.

Unless otherwise noted, all work observed on this date appears to be in general compliance with the applicable contract documents.

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## WELDING INSPECTION REPORT

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### Summary of Conversations:

No significant conversations this day.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 15000422372, who represents the Office of Structural Materials for your project.

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| <b>Inspected By:</b> | Prue,Erik | Quality Assurance Inspector |
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| <b>Reviewed By:</b> | Carreon,Albert | QA Reviewer |
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